

RAPID PRODUCT DEVELOPMENT ASSOCIATION OF SOUTH AFRICA

CHAIRMAN'S REPORT 2005

Introduction

The Rapid Product Development Association of South Africa (RAPDASA) was formally founded at the First Annual General Meeting of the Association on 8 November 2000, held at the CSIR Conference Centre in Pretoria. During the past five years the association has grown steadily, both regarding its national and international recognition through active participation by its members, and the scope of its activities. It can be confirmed that RAPDASA is increasingly being accepted as mouthpiece of the product development community in South Africa. It is therefore a pleasure to report on the activities of the past year.

Management Committee

The Management Committee elected by the Fifth Annual General Meeting was constituted as follows:

Chairperson:	Prof. Dimitri Dimitrov
Vice Chairperson:	Prof. Deon de Beer
Secretary:	Ms Debbie Leeson
Treasurer:	Mr Ludrick Barnard
Members:	Dr Willie du Preez
	Mr Hellmut Bowles
	Mr P Bezuidenhut
	Mr Heman Fourie
	Mr P Humphreys
	Mr Eugene Erfort

Management Committee meetings were held regularly every 6-8 weeks starting from January, March, May, 8 July, 17 August, 14 September, 25 October. A number of ad hoc informal one-on-one meetings of committee members also occurred during the course of the year to handle RAPDASA issues.

Main Objective: RAPDASA's main objective is to contribute to the improvement of the SA product development capabilities and competitiveness.

Progress with Projects

The Management Committee was involved in executing the following projects as specialised focus areas of RAPDASA:

- Rapid Prototyping – promotion of a better utilisation and coordination of existing RP facilities in South Africa, as well as disseminating of research results.

This has to be done in association with our sister institutions – PISA and the National Institute for Foundryman, who are also the main users of these facilities. A substantial role in this regard shall play also the newly established Tooling Association of South Africa (TASA). Although not dedicated events were organised, this aim was achieved by frequent visits to industrial companies mainly from representatives of the main service providers established at CSIR or educational Institutions – the national Product Development Centre (NPDC), the Rapid Prototyping and Manufacturing Centre (RPMC)

at CUT Bloemfontein, the Global Competitiveness Centre (GCC) at the University of Stellenbosch, the Rapid Prototyping Centre (RPC) at the CPUT. During this year for example the GCC processed about 180 inquiries and carried out close to 140 projects in the field of reverse engineering and part inspection, computer modelling, rapid prototyping and tooling. Our colleagues from CUT carried out even more projects this year, in the region of 700-800. The branches being served are mainly the automotive, electronic and household industries. It looks similarly in the other RP Centres as it can be seen at the exhibition hall. Some projects were executed also for the aerospace industry – a proper drive in this field is still to come.

- Books and publications in journals
 - A handbook with a working title “Rapid Prototyping in SA Academic and Industrial Environment”, highlighting the facilities available in SA, as well as showing research results, is in development and shall be available for the next Annual Conference.
 - A number of papers authored by RAPDASA members on work done in the field have been published or accepted for publishing in the internationally highly respected Rapid Prototyping Journal, UK
 - Several papers, authored by RAPDASA members, were presented at specialised international conferences, i.e. at the Conference on Virtual and Rapid Prototyping 2003 and 2005, Leiria, Portugal and published in the proceedings, AFPR 2004, 10th European Forum on Rapid Prototyping and Manufacturing, Paris, France, as well as at local conferences such as the Aluminium Federation and Casting Association of SA Conference, which took place in Warmbath, March 2005.
 - A number of papers were published also in the Metalworking News, one of the most widely read trade journals.
- Technology and Human Recourses for Industry Programme (THRIP) projects – two of the 10 THRIP projects nominated for excellence award this year were in the field of Rapid Prototyping and Tooling
- Workshops – it is a practice that the annual conference is preceded by workshops on relevant topics. This line was set already at the Second Annual Conference in Stellenbosch, 2001. The current 6th Conference doesn't make an exception.
- Tooling Design and Tool-making:

Several RAPDASA members – D. Dimitrov, W du Preez, D de Beer, Bob Bond and others participate actively in various initiatives and organisations related to the tooling industry such as

 - South African Tooling Industry Supporting Initiative (SATISI) forum
 - TASA
 - National Tooling Initiative (NTI)
 - Institute for Advanced Tooling (IAT)
 - 6th Framework Programme (FP6) of the European Union Project Euro Tooling 21.
- Advanced Manufacturing Technology Strategy (AMTS) - a number of RAPDASA members participated in the development of the Advanced Product Technologies Strategy as part of the process to develop an Advanced Manufacturing Technology Strategy for South Africa. A particular spin-off is the currently under development AMTS for the Aerospace Industry.

All these facts speak for a substantial influence and impact of the RAPDASA member's on the SA product development and realisation front.

Website

A website for RAPDASA has been established at the web address <http://www.rapdasa.org.za>. This site will have to be further populated and RAPDASA members are invited to make contributions.

Meantime the existing site within the product development portal, <http://www.productdevelopment.co.za> should be better utilised and used for relevant information and dissemination of R&D results. A concrete step in this direction will be the publication of the conference proceedings on the website as well as the publication of selected papers in SA R&D journals.

GARPA

Deon de Beer continued to act as an active member in the Global Alliance of Rapid Prototyping Associations (GARPA), to which RAPDASA is affiliated. A recognition of these activities is the current representation of the GARPA international secretariat through the CUT Bloemfontein.

Sixth Annual Conference

Dr Willie du Preez and his colleagues of the National Product Development Centre organised the Sixth Annual Conference of RAPDASA, which is taking place here in Pretoria. Headed by Dr. Du Preez, the Organising Committee, supported actively by a committed Conference Secretariat, led by Christelle Stearn, have succeeded in drawing to the conference keynote addresses very competent national and international speakers. I would like particularly to mention the worldwide analyst, Terry Wohlers, as well as Mike Hayes from Boeing. Altogether 44 papers were presented, 13 of them coming from industry.

- Exhibition - 9 exhibition stands representing research laboratories, service providers and vendors were counted this year – a remarkable increase!

Finances

RAPDASA has maintained a healthy financial status, and I want to express my appreciation to our Treasurer, Ludrick Barnard, for his work in this regard. (A dedicated Financial Report will be presented.)

Sponsorship

On behalf of all our members, I acknowledge with sincere appreciation the financial support that we have received from our sponsors for 2005 - SASOL Polymers, AMTS, CPRM, National Research Foundation (NRF), AZTECH Design & Manufacturing Technology, Rapid 3D, EDM Shop, and of course, the hosting institution – CSIR.

RAPDASA Memberships

It is important to know what the members of an organisation are expecting of it. This is why an appropriate Questionnaire was developed and distributed. Please fill it in – it will be a substantial help for the Management Committee to establish the needs and expectations of the members.

Conclusion

It has indeed been a privilege to lead RAPDASA in the 6th year of its existence and to

experience the support of our members, stakeholders in industry and other collaborators. A special word of thanks goes to my very competent and committed colleagues on the Management Committee for their support and enthusiastic collaboration throughout the year. With sustained commitment such as this an exciting and very awarding future of contributing to the growth of South Africa awaits us all!

Dimitri Dimitrov

Pretoria
26 October 2005